Sheet 1 of 1	17	£			and the same		#5		
FORM PTO 144	9 (modified	n			61B				
U.S	S. DEPART	TMENT OF COMME TRADEMARK OF	RCE	2000_1326 API	1 1 2000 CE V6	NL NO. 669,916			
LIST O	F REFEREN	CES CITED BY APPLIC	CANTIO	APPLICANT Mitsuaki OSHIMA et al. FILING DATE					
il .		to PTO: April 11,		FILING DATE September 25, 2000	GROUP 2614				
ļ		T		U.S. PATENT DOCUMENTS		2014			
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING I	DATE IF	
Sex	AA	5,565,926	10-15-96	Bryan et al.		-	Arrivo	TRIATE	
	AB						 		
	AC						 		
	AD								
	AE					REC	CIVED		
	AF					APF	1 2 2001		
	AG					APR 1 2 2001 Technology Center 26			
	АН								
	AI								
		 <u></u> <u>-</u>		DEION DATENTA					
		DOCUMENT NUMBER	DATE	REIGN PATENT DOCUMENTS COUNTRY	CLASS	SUBCLASS	TRANSLA	TION	
SE	LA	2-166979	6-27-90	Japan		_	YES abstract	NO	
	AK						dostract		
	AL								
	АМ								
	AN								
		OTHER	DOCUMENT(S) //o	oludios Austra Tita					
	AO			cluding Author, Title, Date, Pertin	ent Pages, Etc.)				
	AP		· · · · · · · · · · · · · · · · · · ·						
	AQ								
EXAMINER		Amando	i Se						
				DATE CONSIDERED	`. <i>8</i> 0 ⊂	20.02		- 1	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

					7	<u> </u>					
Sheet 1 of 1			_						· <u>-</u> ·		
FORM PTO 1449 (/		MENT OF COMMER	CE	ATTY DOCKET NO. SERIAL NO. 09/669,916							
PATE	DNA TV	TRADEMARK OFFI	CE	APPLICANT Mitsuaki OSHIMA et [*] al.							
(Us	se several	sheets if necessary)		FILING DATE September 25, 2000 GROUP 2614							
Date Sur	mittea t	o PTO: January 5,	2001								
				U.S. PATENT DOCUMENTS			Ι		<u> </u>	,	
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CL	ASS	SU	BCLASS	FILING I APPRO	DATE IF PRIATE	
DE	AA	5,243,629	9-7-93	Wei		-		- -			
	AB			(d , 00 h)			7	ECE			
	AC			O IM 0 5 JULY SE		Tech	JA	Vog	ED		
	AD			PATENT & TRIBE			10/09	Cen	ED 01 500		
	AE							" CF 2	<i>600</i>		
	AF		·								
	AG										
	АН										
	Al			·							
				FOREIGN PATENT DOCUMENTS							
		DOCUMENT NUMBER	DATE	COUNTRY	CL	ASS	SU	BCLASS	TRANSI		
2BC	AJ	64-74836	3-20-89	Japan		•	Ĩ	-	abstract		
\	AK	53-108215	9-20-78	Japan					abstract		
	AL	63-28145	2-5-88	Japan					abstract		
	AM	64-68144	3-14-89	Japan					abstract		
SD	AN	5-218978	8-27-93	Japan	1		1	-		х	
		отн	ER DOCUMENT(S) (Including Author, Title, Date, Pert	inent Pag	es, Etc.)					
	AO										
	AP								· • · · · · · · · · · · · · · · · · · ·		
	AQ										
		<u> </u>	1. 1.					<u>~~/</u>			
EXAMINER		Am	andade	DATE CONSIDE	RED	<u>8.</u>	<u>20.</u>	05/			

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 1 of 6									
FORM PTO 1449 (n		MENT OF COMMER	CE	ATTY DOCKET (2000_1326	 NO.	SERIAL NEW	NO.		
PATE	DNA TN	TRADEMARK OFFI ES CITED BY APPLICA	CE	APPLICANT Mitsuaki OSH	HIMA et al.				
(Us	e several	sheets if necessary) PTO: September 25		FILING DATE September 2	5, 2000		GROUP		
		· · · · · · · · · · · · · · · · · · ·		U.S. PATENT DO	DCUMENTS				
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAI	ME CL	ASS	SUBCLASS	FILING I	
2R	AA	5,311,550	5-10-94	Fouche	e et al.		-		
	АВ	4,630,287	12-16-86	Arms	trong				
	AC	4,271,527	6-2-81	Arms	trong				
	AD	5,050,188	9-17-91	Di	rr				
	AE	5,398,073	3-14-95	w	ei				
	AF	5,452,015	9-19-95	Hulya	alkar				
	AG	5,565,932	10-15-96	Gitta	et al.				
	АН	5,481,412	1-2-96	Banna					
	AI	3,909,721	9-30-75	Bussgar	ng et al.		1		
	,			FOREIGN PATENT	DOCUMENTS		1		
		DOCUMENT NUMBER	DATE	COU	NTRY CI	ASS	SUBCLASS	TRANS YES	LATION NO
	AJ	0365431	4-25-90	Ε	Р				X
	AK	0485105	5-13-92	E	Р			х	
	AL	92/14343	8-20-92	w	0			x	
	АМ	89/08366	9-8-89	w	0	_		x	
	AN	0031193	7-1-81	E	Р			х	
		отн	ER DOCUMENT(S) (Including Author	r, Title, Date, Pertinent Pa	ges, Etc.)			
	AO				A Digital Radio-Relay 1982, vol. 24, no.			4 and 5 GHz	Bands",
	AP				vision Images, Part 2 o. 3, pages 259-268		atible System	", Signal Prod	cessing
J. J.	AQ	Mitsuaki Oshim	a, "Constellat	ion-Code Divisi	ion Multiplex for Digi	tal HDT\	/", IEEE, 1992	 2, pages 108	6-1092.
EXAMINER	,	Amarda	Je/		DATE CONSIDERED	80	.26.02		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 2	of 6	<u> </u>			***.**	ar T - %					- 72	
	PTO 1449 (m	nodified)			ATTY DOCKET (2000_1326	NO.		SERIAL NEW	NO.			
	PATEN	IT AND	MENT OF COMMER TRADEMARK OFFI ES CITED BY APPLICA	CE	APPLICANT Mitsuaki OSI	HIMA et al.						
,			sheets if necessary) PTO: September 25	3000	FILING DATE September 25, 2000							
	Jate Submi	itted to	r 10. September 20	, 2000	U.S. PATENT DO							
	MINER		DOCUMENT NUMBER	DATE	NA		CLA	\ss	SUBC	CLASS	FILING (
A	\mathcal{D}	АА	4,227,152	10-7-80	Godaro	d et al.	_		١			
		AB	4,525,846	6-25-85	Breme	r et al.						
		AC	4,751,478	6-14-88	Yos	hida						
,		AD	4,891,806	1-2-90	Farias	et al.						
		AE	4,903,125	2-20-90	Par	ker						
		AF	4,937,844	6-26-90	Ka	30						
		AG	5,164,963	11-17-92	Lawren	ce et al.						
		АН	5,555,275	9-1996	Osh	ima				7		
		Al			:							
					FOREIGN PATENT	DOCUMENTS	,					
			DOCUMENT NUMBER	DATE	coul	NTRY	CL	ASS	SUBC	CLASS	TRANSI YES	LATION NO
		AJ	0311188	4-12-89	E	Р					×	
		AK	0329158	8-23-89	E	P					х	
		AL	64-5135	1-10-89	J	P					х	
		АМ	63-28145	2-5-88	J	Р					х	
		AN	62-133842	6-17-87	J	Р	1	/			Х	
			отн	ER DOCUMENT(S	6) (Including Autho	r, Title, Date, Per	tinent Pag	es, Etc.)		<u>.</u>		
		AO	Tricia Hill et al., COM-31, June				ΩΑΜ " , Ι	EEE Tra	insactio	ns on Co	ommunicati	ions, vol.
		АР	Hideki Ishio et a 20.	al., "A Proposa	al of a Carrier [Digital Transm	ission S	ystem l	Using M	lulti-Leve	el APSK", p	pages 1-
A	(T)	AQ	Shanmugam, "I	Digital and An	alog Communic	cation System	s" 1979	9, p. 27	2.			
EXAMIN	IER		Amando	50		DATE CONSIDE	RED	08	3.20	1.02V	<u> </u>	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

	Sheet 3 of 6											
Sheet 3 c	of 6											
FORM PT	O 1449 (m		MENT OF COMMER	CE	ATTY DOCKET 1 2000_1326	NO.		SERIAL NEW	NO.			
	PATEN	IT AND	TRADEMARK OFFI	CE	APPLICANT Mitsuaki OSI	HIMA et al.		•			,	
	(Us	e several	sheets if necessary)		FILING DATE	FILING DATE September 25, 2000						
DE	ate Submi	tted to	PTO: September 25	5, 2000	· · · · · · · · · · · · · · · · · · ·						·	
				 ,	U.S. PATENT DO	OCUMENTS			<u> </u>			
*EXAN INITI			DOCUMENT NUMBER	DATE	NA	ME	CLA	ASS	SUBC	CLASS	FILING D	
212	<u>ر</u>	AA	5,105,442	4-14-92	w	'ei		-		··· ==		
		AB	4,048,572	9-13-77	Dogliot	ti et al.						
		AC	5,282,019	1-25-94	Basile	et al.		··· ••••				
		AD	5,311,547	5-10-94	w	/ei						
		AE	5,267,021	11-30-93	Ramchand	dran et al.						
		AF	5,038,219	8-6-91	Yamash	ita et al.						
		AG	5,087,975	2-11-92	Citta	et al.						
		АН	5,086,340	2-4-92	Citta	et al.	_	レ	1	<u> </u>		
		Al										
					FOREIGN PATENT	DOCUMENTS		·				
			DOCUMENT NUMBER	DATE	COU		CL	ASS	· subc	CLASS	TRANSI YES	_ATION NO
•		AJ	53-137657	12-1-78	J	Р		ر ر	_		х	
		AK	0282298	9-14-88	Euro	ope					x	
:		AL	0392538	10-17-90	Eur	оре					х	
		АМ	0490552	6-17-92	Eur	ope					х	
		AN	0506400A2	9-30-92	Eur	ope		/	1			
			отн	ER DOCUMENT(S) (Including Autho	r, Title, Date, Pertii	nent Pag	es, Etc.)				
		AO	Khaled Fazel et 1081-1085	al., Combined	multilevel cod	ling and multire	solutio	n modu	lation,	February	/ 8, 1993, I	Pages
		АР	P. Hoeher et al. IEEE Global Tele - 2.1.7									
R	S	AQ	K. M. Uz et al., 1992, Pages 28		Itiresolution so	ource coding an	d mod	ulation 1	or digit	al broad	cast of HD	ΓV * ,
EYAMINE	D		Amando	Je/		DATE CONSIDER	RED	08	20.	02/		
EXAMINE	r	0	, (,, 55 55			DATE CONSIDER	IEU	<u> </u>				

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Short 4 - 4 C			6								
Sheet 4 of 6	0 lm - digi - c			ATTY DOCKET	NO.	-	SERIAL	NO.	<u></u>		
	S. DEPARTI	MENT OF COMMER		2000_1326	NO.		NEW	.40.			
		TRADEMARK OFFI		APPLICANT Mitsuaki OSI	HIMA et al.						
	(Use several	sheets if necessary) PTO: September 25	<u> </u>	FILING DATE September 2	5. 2000			GROU	JP		
				U.S. PATENT DO				1			-
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NA		CL	ASS	SUE	BCLASS	FILING I	
SIN	AA	5,142,353	8-25-92	Kageyar	na et al.		-		<u></u>		
1	AB	5,197,061	3-23-93	Halbert-Las	ssalle et al.						
	AC	5,291,289	3-1-94	Hulyalk	ar et al.					_	
ZP	AD	5,166,924	11-24-92	Мо	ose						
	AF										
	AF					ļ				-	
	AG					ļ					
	АН										
	Al										
				FOREIGN PATENT	DOCUMENTS			,			
		DOCUMENT NUMBER	DATE	coul	NTRY	CL	ASS	SUE	BCLASS	TRANS YES	LATION NO
ZP	LA	0448492A1	9-25-91	Eur	ope				1		
	AK	0485108A2	5-13-92	Eur	ope						
	AL	0525641A2	2-3-93	Eur	ope						
	АМ	0540231A2	5-5-93	Eur	ope						
	AN	0531046A2	3-10-93	Eur	оре	1					
		OTH.	IER DOCUMENT(S	6) (Including Autho	r, Title, Date, Pe	rtinent Pag	es, Etc.)				
	AO	K. M. Uz et al., 69.	Multiresolutio	on Source and (Channel Codir	ng for Di	gital Bro	adcas	t of HDT	V, 1992, P	ages 61-
	AP	Nambi Seshadri Fading Channel						l Error	Protection	on for the R	ayleigh
ZR	AQ	William F. Schro	eiber, Spread-	Spectrum Tele	vision Broadc	asting, S	MPTE .	Journa	I, August	1992, Pag	es 538-
EXAMINER	9	Amanda	de le		DATE CONSID	ERED C	8.2	0.0	V		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

,							A		 -		
Sheet 5 of 6 FORM PTO 1449 (n	nodified)			ATTY DOCKET	NO.		SERIAL	NO.			
		MENT OF COMMER TRADEMARK OFFI		2000_1326			NEW				
		ES CITED BY APPLICATION (Sheets if necessary)	ANT(S)	Mitsuaki OSI	HIMA et al.			<u> </u>			
		PTO: September 25	5, 2000	FILING DATE September 2	5, 2000			GROUP			
				U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NA	ME	CLA	ss	SUBCLASS	FILING I APPRO		
	АА								_		
	АВ										
	AC										
	AD										
	ΑE										
	AF										
	AG										
•	АН										
	AI								_		
				FOREIGN PATENT	DOCUMENTS	r					
		DOCUMENT NUMBER	DATE	coul	NTRY	CLA	\ss	SUBCLASS	TRANS YES		
SO	AJ	85/04541	10-10-85	W	О		-				
	AK										
	AL										
	АМ								=		
	AN										
		ОТН	IER DOCUMENT(S	i) (Including Autho	r, Title, Date, Pert	tinent Pag	es, Etc.)				
IR	AO		artin Vetterli et al., Multiresolution Coding Techniques for Digital Television: A Review, Multidimensional vstems and Signal Processing, Volume 3, May 1992, Pages 161-187.								
	АР	Ezio Biglieri et a	al., Introduction	n to Trellis-Cod	led Modulation	n with A	pplicati	ons, April 6, 1	992, Pages	173-207.	
AS	ΔQ	English Languag		European Pate	nt No. 93 30	7575					
EXAMINER		Amer	dati		DATE CONSIDE	RED (ઝ8.ય	202			

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 6 of 6												
FORM PTO 1449		MENT OF COMMER	rCE	ATTY DOCKET 2000_1326			SERIAL NEW	NO.				
PATE	ENT AND	TRADEMARK OFF	ICE	APPLICANT Mitsuaki OSHIMA et al.								
(4	Jse severa	I sheets if necessary)		FILING DATE September 25, 2000								
Date Subi	mitted to	PTO: September 2	5, 2000	· · · · · · · · · · · · · · · · · · ·				L				
*EXAMINER	1	DOCUMENT	DATE	U.S. PATENT D	/	- Cl	ASS	GUB	CLASS	FILING	DATE	
INITIAL		NUMBER	DATE	NA NA	ME /		455	508	CLASS	FILING DATE IF APPROPRIATE		
2R	AA	4,636,876	1-13-87	Sch	vartz	$\overline{+}$			<u> </u>			
	AB	4,855.692	8-8-89	Kennar	d et al.	\perp					<u></u>	
	AC	4,873,701	10-10-89	Tre	tter							
	AD 4,958,360 9-18-90 Sari											
V	AE	5,115,453	5-19-92	Calderba	ink et al.							
SO	AF	5,168,509	ıra et al.	1			/	÷.				
	AG								÷			
	АН										•	
	Al											
				FOREIGN PATENT	DOCUMENTS							
		DOCUMENT NUMBER	DATE	cou	NTRY	CL	ASS	SUB	CLASS	TRANS YES	LATION NO	
2B	AJ	0122805	10-24-84	E	P					х		
VIR.	AK	63-180280	7-25-88	J	Р				•	abstract		
	AL											
	АМ											
	AN											
		отн	ER DOCUMENTIS) (Including Autho	r, Title, Date, Pertin	ent Pag	es, Etc.)					
ZK	AO				el Orthogonal VS s, June 14-16,							
	AP	Thomas M. Cov	ver, Broadcast	Channels, IEE	E Transactions o	n Info	ormation	n Theor	γ, Janu	ary 1972, P	ages 2-14	
ZX	AQ "Optimum Weighted PCM for Speech Signals", Sundberg, IEEE Transactions on Communications, Volume COM-26, No. 6, June 1978, Pages 872-881.											
EXAMINER	- t	Ama	adabe		DATE CONSIDERE	D	1	0	8.20	D. 02)		

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 1 of 1	72	<u> </u>		~		<u> </u>		. <u>.</u> .
FORM PTO 1449			QIPE &	АТТУ DOCKET NO. \$2000_1326		AL NO. 669,916	elan e ne	
PATE	NT AND	MENT OF COMMER TRADEMARK OFFI	SEP 5 8 SUUT	CAPPLICANT			·	
.,		S CITED BY APPNE sheets if necessary	~ .	Mitsuaki OSHIMA et al.		1		
Date Subr	nitted to f	PTO: September 28	RADENT	FILING DATE September 25, 2000		2634		
	-} 			U.S. PATENT DOCUMENTS	T			
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING D. APPROPI	
	AA							
	АВ							
	AC					- A		
	AD					OC, C	E/L	
	AE					chnology O		
	AF					Technology Center	72	
	AG						000	
	АН							
	AI							
				FOREIGN PATENT DOCUMENTS				
		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSL/ YES	ATION NO
2R	LA	04-196822	7-16-92	Japan			abstract	
<u> </u>	AK	0 506 400	9-30-92	Europe			x	
	AL							
	АМ							
	AN							
		ОТН	ER DOCUMENT(S	6) (Including Author, Title, Date, Pe	rtinent Pages, Etc	·.)		
	AO							
	АР						<u>, in </u>	
							<u></u>	
	AQ				-			
EVANINED		tmandate	-	DATE CONSID	EDED 09	. 20.02	· · · · · · · · · · · · · · · · · · ·	
EXAMINER		50 00001	<u> </u>	DATE CONSID	ENED C			

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.